

of the garden opens up wonders of beauty and quaintness undreamt of by the uninitiated. Nowhere do we find quainter and more striking music than in Ireland and nowhere do we find a greater love for and higher development of music, art, and literature than in the old Celtic dominions, *i. e.*, France, Spain, Italy and perhaps southern Germany. In the United States of America the descendants of the "Celts" are with us in large numbers and their great heritage should neither be neglected nor forgotten.

## SOME RECENT EXTENSIONS OF THE KNOWN RANGE OF *PINUS PALUSTRIS*

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The long-leaf pine, *Pinus palustris* Mill., is such an abundant, conspicuous and unmistakable tree that its natural distribution was long ago mapped with reasonable accuracy, and no noteworthy additions to its recorded range seem to have been made since about 1880, when it was found in the mountains of Georgia and Alabama by Dr. Charles Mohr and others.\* Its distribution as known 25 or 30 years ago is shown on Plate 3 of Mohr's *Timber Pines of the Southern United States*,† and that represents pretty well our knowledge today, except that it extends down the east coast of Florida to about latitude 28°, and eastward in Middle Georgia to within a few miles of Atlanta, and probably does not come as close to Vicksburg, Miss., as is indicated by the map.‡

A large outlying colony of this pine in the northern part of Walker County, Alabama, has been known for some years,§ and in the spring of 1922 I was informed by Mr. B. M. Luf-

\* See *Torrey* 5: 55. April 1905.

† U. S. Forestry Bull. 13. 1896. (Revised 1897.) As far as *Pinus palustris* is concerned this supersedes Dr. Mohr's forest maps of Alabama and Mississippi in the 9th volume of the Tenth Census, which are not very accurate.

‡ A map on page 3 of W. R. Mattoon's bulletin on long-leaf pine (U. S. Dept. Agric. Bull. 1061; dated July 29, 1922, but apparently not published until a few months later) represents it as extending over nearly all of Florida, Alabama and Louisiana and more than half of Mississippi, but that is an unwarranted exaggeration.

§ See *Geol. Surv. Ala. Monog.* 8: 54, 141. 1913. I have not visited that place since 1906, but a railroad has been built to it since, and doubtless much of the timber cut out.

burrow, in charge of the Alabama National Forest, in the sandstone plateau region of Lawrence and Winston Counties, that there is a good deal of it in the central part of the latter county, which adjoins Walker on the north. In April, 1922, I walked through Winston County from about the center of its northern border to Haleyville near its western edge, and although I did not see any long-leaf pine, Mr. Lufburrow's observations were confirmed by some of the natives with whom I talked.

On the front cover of the Alabama School Journal (Birmingham) for May, 1922, there is a half-tone cut of a new schoolhouse in the eastern part of Walker County, with some long-leaf pines in the background. That is several miles from any station for this tree known to botanists.

In the coastal plain of Alabama *Pinus palustris* is scattered throughout the central pine belt (Cretaceous) on the poorer soils from the eastern border of the state to about the middle of Tuscaloosa County, but it had not been recorded northwest of there. On Oct. 21, 1922, I was traveling from Fayette to Tuscaloosa, a distance of about 40 miles, by an automobile stage line recently established, and at a point estimated to be about 15 miles south-southeast of Fayette (there were no mile-posts along the road) *Pinus palustris* began to appear sparingly in dry woods on sandy uplands (mapped as "Ruston fine sandy loam" in the government soil survey of Fayette County, 1920). I was assured by other passengers that this was well within Fayette County, and thus another county was added to the list of those in which it grows.

A month later I traveled southeastward from Union, Mississippi, on the Meridian & Memphis R. R. (which has been built since the publication of the government soil survey of Lauderdale County about ten years ago), and I noticed *Pinus palustris* beginning near the village of Little Rock, about six miles from Union, in Newton County, and becoming increasingly abundant from there on to Meridian. Dr. Mohr's 1896 map does not show it as occurring in Newton County or anywhere northwest of Meridian, and the northernmost station mentioned in Dr. E. N. Lowe's Flora of Mississippi\* is Lost Gap, about eight miles west of Meridian; but Dr. E. W. Hilgard† put its northern

\* Miss. Geol. Surv. Bull. 17. 1921.

† Geol. & Agric. Miss. 303. 1860.

limit in Mississippi at Patickfaw Creek in Kemper County, which is about the same distance north of Meridian that Little Rock is northwest.

The lumbermen saw the pine in Newton County long before I did, though, and have already cut out practically all the trees worth taking. In that part of Mississippi it seems to be almost confined to the rocky ridges of the Buhrstone formation (Eocene), locally known as mountains, which trend about northwest and southeast,\* and it is very much in evidence around Lost Gap, where the Alabama & Vicksburg Ry. tunnels through the mountains (the only tunnel in Mississippi). A logging road branching off northward from the A. & V. Ry. west of the tunnel seems to have reached out to the limits of long-leaf pine in that direction even before the M. & M. R. R. was built.

In this connection an alleged outlying station for this species in Virginia that has never been verified should be mentioned. All authorities agree that *Pinus palustris* is or has been found in a few of the southeasternmost counties of Virginia, and details are given in the county descriptions in W. C. Kerr's report on cotton production, in the 6th volume of the Tenth Census, 1884 (see pages 631, 635, 637); though there seems to be no authentic record of its being seen in that state in the last thirty or forty years. Dr. F. P. Porcher, in the second edition of his "Resources of the Southern Fields and Forests," 1869, states that it occurs in Powhatan County, which is in the Piedmont region, farther north and also farther west than any of the other reported Virginia stations. But it is possible that some acquaintance of Dr. Porcher's who was familiar with *Pinus echinata* and *P. Virginiana*, the two common pines of Piedmont Virginia, was traveling southeastward and saw *Pinus Taeda* for the first time in Powhatan County, and mistook it for *P. palustris*, which he had perhaps never seen.

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\* For a description of the same mountain range in Alabama see Geol. Surv. Ala. Monog. 8: 98, 99, 159. 1913; and Spec. Rep. 11: 29-30, 34. 1920.